

ABSTRACT OF THE DISCLOSURE

Methods for the detection, monitoring and treatment of malignancies in which the HER-2/*neu* oncogene is associated are disclosed. Detection of specific T cell activation (e.g., by measuring the proliferation of T cells) in response to *in vitro* exposure to the HER-2/*neu* protein, or detection of immunocomplexes formed between the HER-2/*neu* protein and antibodies in body fluid, allows the diagnosis of the presence of a malignancy in which the HER-2/*neu* oncogene is associated. The present invention also discloses methods and compositions, including peptides, for treating such malignancies.